THE USE OF THE GLUECK SOCIAL PREDICTION TABLE IN DETERMINING PROBABILITY OF RECIDIVISM FOR YOUNG ADULT MALE OFFENDERS: A PRELIMINARY STUDY

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THE USE OF THE GLUECK SOCIAL PREDICTION TABLE IN DETERMINING PROBABILITY OF RECIDIVISM FOR YOUNG ADULT MALE OFFENDERS: A PRELIMINARY STUDY

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The undersigned hereby certify that they have read and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled The Use of the Glueck Social Prediction Table in Determining Probability of Recidivism for Young Adult Male Offenders: A Preliminary Study submitted by Park O. Davidson in partial fulfillment of the requirements for the degree of Master of Arts.

ABSTRACT

This thesis was set up as a preliminary study for assessing the possibilities of using the Glueck Social Prediction Table as a predictive instrument for determining probability of recidivism for young adult male offenders. The Table was consequently administered to 140 known offenders incarcerated in the Bowden Rehabilitation Institute of Alberta. These offenders were divided into four groups according to the number of offences they had committed. Results of this grouping showed that nearly all third and fourth (or subsequent) offenders obtained scores of over 250 on the Table while less than 50 percent of first offenders had scores of over 250. According to the rationale of the Table, individuals who obtain scores of over 250 are (or will probably be) persistent offenders. On a basis of the significance of these results it was concluded that the Table had definite possibilities as an instrument for assessing probability of recidivism.

These results, therefore, appeared to warrant the instigation of a longitudinal study to determine with what degree of accuracy the Table could differentiate recidivists predictively.

It was found further that for this sample, there was no correlation between the age of the offender and the number of offences he had committed. These 140 offenders were then subdivided into two age groups to see if the Table

differentiated recidivists for the age group of 19 and over as well as it did for the age group 16 to 19. Results of this analysis indicated that the Table should be as applicable to the older offenders as it is to the younger offenders.

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INTRODUCTION TO THE GLUECK SOCIAL PREDICTION TABLE

In Unraveling Juvenile Delinquency (11) Professors Sheldon and Eleanor Glueck present three tables on the basis of which they believe it would be possible to select those children who will "probably become persistent delinquents unless timely and effective intervention diverts their predicted course of maladjustment into socially acceptable channels". (8,p.7) One of these prediction tables is based on five traits of character structure derived from the Rorschach Test (social assertion, defiance, suspiciousness, destructiveness, and emotional lability); a second, on five traits of temperment as determined by psychiatric interviews (adventurousness, extroversion in action, suggestibility, stubborness and emotional instability); and a third, on five social factors that differentiate the delinquent from the control group of non-delinquents (supervision of boy by mother, discipline of boy by father, affection of mother for boy, affection of father for boy and unity of the family group). The five predictive factors compromising a particular table were initially selected from among those showing the widest range of difference in incidence between the 500 delinquents encompassed in Unraveling Juvenile Delinquency and their 500 matched non-delinquents. The last of these three tables (dealing with social factors) has become

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Because of the relative unfamiliarity of this Table, it was felt advisable to begin this thesis with a discussion of the Table before presenting the problem to be studied.

the best known and aroused the widest interest. In subsequent studies it has been known as the "Glueck Social Prediction Table (#). In 1956 the Gluecks had the three tables submitted to a statistical analysis to determine which of the tables, or combinations of them, would yield the most satisfactory results.

Dr. Angoff of Princeton University, in conducting this analysis, determined that the Social Table alone identifies delinquents better than either of the other two tables. On the basis of his results the Gluecks concluded that;

> "Although Angoff's statistical analysis confirms our findings that combinations of factors involving social plus psychiatric data, social plus Rorschach data, or all three sets of data combined, yield only slightly better relationship to the criterion of delinquency than that attained by the Social Prediction table alone, it does not appear that the increment in efficiency is great enough to warrant a recommendation that Rorschach Tests and psychiatric skills be utilized in screening "or spotting" persistent delinquents. This is especially true in viewof the fact that less training and skill is required to become adept in the classification of social factors than in the application

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The term "Glueck Prediction Scale" is used interchangeably with "Glueck Prediction Table" and it will be called either of these or referred to as merely "the Table" or "the Scale" in the text of this thesis.

"and interpretation of Rorschach Tests or the making of psychiatric examinations and assessments.

"We are therefore satisfied to recommend the use of the Social Prediction Table . . . . . and we look forward to its development as a large scale screening device . . . . ." (10,p.182).

This Social Prediction Table, alone, is the subject under discussion in this thesis.

A description of the origin and design of this table will provide a background for its experimental application as undertaken in this study.

During ten years of research the Gluecks carefully compared 500 persistent delinquents and 500 proved non-delinquents who had been matched (#) according to age, general intelligence, ethnic origin, and residence in underprivileged neighborhoods. This latter matching was done according to the Gluecks - in order to control "a complex of socio-economic and cultural factors whose similarity would permit us to find out why it is that even in regions of most adverse social conditions most children do not commit legally prohibited acts of theft, burglary, assault, sexual aggression and the like". (11,p.14-15) The persistent

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The methods and accuracy of this matching technique are beyond the scope of this study but the interested reader may refer to Unraveling Juvenile Delinquency Chapter IV. Criticisms and inaccuracies of this matching technique are discussed by Mr. Rubin in an article "Illusions in a Research Project Using Matched Pairs" (20)

delinquents were drawn from two Massachusetts correctional institutions and the proved non-delinquents were selected from the public school population in the Boston area.

The goal of Unraveling Juvenile Delinquency as stated in the authors' preface was to study "causation, with a view to determining the bases for truly crime-preventative programs and effective therapy." (11,p.14) Their intention was to be eclectic rather than particularistic. As a result of this aim, the two groups were studied and compared intensively on 402 factors pertaining to their family history, personal background, physique, health, qualities of intelligence, traits of character and temperment. Those factors which mostly clearly differentiated the delinquent from the non-delinquent were to be used as a basis for their predictive tables.

The first step in relation to the construction of the Social Prediction Table was to select those factors pertaining to the family and personal history of the delinquents and non-delinquents which markedly differentiated the two groups. Since the Gluecks had originally hoped that it would ultimately be possible to select potential delinquents upon - or soon after - school entrance, they selected from among the differentiating factors those that they felt were most applicable through most the life of the delinquent and likely to be present in the life situations of each boy before entering school (#).

Hence they rejected such factors as gang membership because few boys become members of gangs until their early adolescent years (11, p.260)

They narrowed these differentiating factors further by selecting those most likely to be independent of each other. A further criterion in their selection of factors was that it should be relatively easy to secure the data on predictors. Finally they decided that the Tables should contain no more than five factors as predictors. Whether this last is a valid criterion for the Table, the Gluecks do not demonstrate, although it is authoritatively stated: "Experience has shown that such a number is adequate for prediction purposes" (11, p.259).

Using the five criteria given in the above paragraph the Gluecks selected the most suitable factors to make up their Social Prediction Table as follows: 'Discipline of Boy by Father', 'Supervision of Boy by Mother', 'Affection of Father for Boy', 'Affection of Mother for Boy', and 'Cohesiveness of the Family'. With these five headings as the primary factors there are various subcategories under each heading, which are assigned weighted scores by a method the Gluecks have used in all their predictive studies - as described below.

In the case of the Social Prediction Scale the weighted score of each of the subcategories represents the percentage of delinquents among the 1,000 cases of Unraveling Juvenile Delinquency who were actually found in a particular subcategory of a factor. For example, for the subcategory, 'overstrict or erratic discipline by father', it was found that of all

the cases in the Glueck Study, 72.5 per cent were delinquents. Hence this subcategory receives a weighted score of 72.5. Table I presents the five social factors with their subcategories and weighted scores.

TABLE I

FIVE SOCIAL FACTORS WITH THEIR SUB-CATEGORIES AND WEIGHTED SCORES

Social Factor	Weighted Score
1. Discipline of Boy by Father	
Overstrict or erratic	72.5
Lax	59.8
Firm but kindly	9.3
2. Supervision of Boy by Mother	
Unsuitable	83.2
Fair	57.5
Suitable	9.9
3. Affection of Father for Boy	
Indifferent or hostile	75.9
Warm (including overprotective)	33.8
4. Affection of Mother for Boy	
Indifferent or hostile	86.2
Warm (including overprotective)	43.1
5. Cohesiveness of Family	
Unintegrated	96.9
Some elements of Cohesion	61.3
Cohesive	20.6

Instructions for the interpretation of each of the weighted subscores is given as follows: (8,p.9)

1. Overstrict: Father is harsh, unreasoning, demanding obedience through fear;

Erratic: Father varies between strictness and laxity, is not consistent in control;

Lax: Father is negligent, indifferent, lets child do what he likes;

Firm but kindly: Discipline is based upon sound reason which the child understands and accepts as fair.

2. Unsuitable: Mother is careless in her supervision, leaving the child to his own devices without guidance, or in the care of an irresponsible person;

Fair: Mother, though home, gives only partial supervision to child.

Suitable: If mother does not work outside the home and is not ill, she personally keeps close watch on the child or provides for his leisure hours; if she is ill or out of the home a good deal there is a responsible adult in charge.

3. & 4. Indifferent: Father (or mother) does not pay much attention to child;

Hostile: Father (or mother) reject child;

Warm (including overprotective): Father (or mother) is sympathetic, kind, attached, even overprotective.

5. Unintegrated: Home is just a place to "hang your hat", self interests of members exceed that of group;

Some elements of cohesion: Even if family group may not be entirely intact (because of absence of one or more members), the remaining group has at least some characteristics of a cohesive family.

Cohesive: There is a strong "we" feeling among the members of the immediate family as evidenced by co-operativeness, group interests, pride in the home, affection for each other.

METHODS OF SCORING

Further instructions on the use of the table are given in a footnote. (8,p.10)

Those who wish to use the Table are asked to note that the determination of the particular category into which a case falls is based on the situation generally prevailing up to the point at which the prediction ismade. In cases in which one or the other of the parents has left or been removed from the home before the child was 3 years old and there is no parent surrogate (step father, foster parent) discipline of the missing parent is graded as 'lax', affection as 'indifferent' and supervision as 'unsuitable'. But if there has been a substitute parent, at least since the child was three years old, the discipline, affection, and supervision of the parent substitute are rated.

In regard to cohesiveness of the family it is usually rated 'fair' in the case where one of the parents is for any reason not living in the home, providing the remaining family group, of which

> the child is a part, is a "cohesive unit". If, however, the absence of one of the parents from the home does not reflect his or her indifference to the family, but is rather the result of unavoidable circumstances, such as illness, the family unit is regarded as cohesive if all other elements that enter into this judgment would normally have designated the family as cohesive."

The final step in the construction of the Social Prediction Scale was to determine the highest and lowest possible scores that a boy could obtain by adding up the individual weighted scores. This resulted in a score range of 116.7 and 414.7. Between these limits score-class intervals were then established. Each delinquent and non-delinquent in the Gluecks' study, about whom there was available information on all five factors, was scored on these factors and after adding his scores he was placed in his appropriate score class. When all these boys were thus assigned, the number of delinquents and non-delinquents in each score class was converted into percentages.

TABLE II #

PERCENT OF DELINQUENTS AND NON-DELINQUENTS IN EACH OF FOUR WEIGHTED SCORE CLASSES, BASED ON FIVE FACTORS OF SOCIAL BACKGROUND

Weighted Failure Score Class	Percent of Delinquents in Each Score Class		Percent of Non-Delinquents in Each Score Class		Total
	No.	%	No.	%	
Under 200	24	8.2	269	91.8	293
200 - 249	40	37.0	68	63.0	108
250 - 299	122	63.5	70	36.5	192
300 & over	265	89.2	32	10.8	297
Total Cases	451		439		890

(From Unraveling Juvenile Delinquency Table XX-3 p.262)

From this table the Gluecks devised the following table (8,p.9).

TABLE III #

LIKELIHOOD OF PERSISTENT DELINQUENCY

Failure Score Class	Percentage of delinquencies occurring in this score class	Likelihood of Delinquency
Under 200	8.2	Negligible
200 - 249	37.0	Low
250 - 299	63.5	More than Even Chance
300 & over	89.2	High

#(Titles of Tables modified from Unraveling Juvenile Delinquency)

Inspection of Table III shows that the chances of delinquency of those boys placed in the failure score class of 250 - 299 exceeds fifty-fifty, and when these combine with those cases scoring 300 and over they sharply differentiate their probability of potential delinquency from that of those who score under 250. Hence the score of 250 is usually considered as the "cutting off point" between persistent delinquents and non-delinquents (25, p.456).

ASSESSMENT OF THE TABLE

Because the Glueck Social Prediction Scale was devised from an eclectic empirical study rather than from a particular theoretical framework it has been more or less immune to criticism from a theoretical standpoint. The psychiatrists, psychologists and sociologists have generally been content to wait for the results of validation studies to see whether the Scale really works or not. Its acceptance or rejection will be based on how good it is in practice and not on the theoretical issues involved.

There are still strongly divided schools of thought on the causation of criminal behaviour but the Prediction Table seems to have slipped between these warring schools without drawing strong fire from either camp. There are, of course, reasons for this: Those with a psychiatric orientation have presented the least opposition to the Scale because the major exponents of this chool (12)(7)(1) have long believed

that the home and family life were crucial in determining a child's future behaviour. For similar reasons, perhaps, psychologists who have worked in this area (17)(24) have failed to take serious issue with the Social Prediction Table. Social workers probably because of their experiences in the homes of juvenile delinquents and their desire for measurement tools have also apparently refrained from criticism. The sociologists are generally the ones who have been most willing to point out weaknesses and faults in the Prediction Table. Perhaps because of their more extensive study of the complexity of juvenile delinquency, and criminology in general, they have been more hesitant in their enthusiasm and more critical in their acceptance.

CRITICISMS OF THE TABLE

The questions that have been raised, regarding the efficiency of the Social Prediction Scale when applied to boys who differ in various respects from the original sample, generally fall into five categories (paraphrased from Richard Thompson's validity study 1952. (25))

It must be pointed out that the criticisms discussed here relate solely to the Social Prediction Table. The book Unraveling Juvenile Delinquency, on the other hand, has not escaped so lightly and there have been numerous criticisms, discussions and dissections from all the various schools of thought on juvenile delinquency. See for instance "A Symposium on Unraveling Juvenile Delinquency", Harvard Law Review, 64, 1951, pp. 1022-1041.

1. Can the Glueck Scale, based as it is on boys eleven to seventeen years old, predict delinquency of boys in different age groups? Thus Professor Elio D. Monachesi writes "It is true that there is evidence available that suggests that many aspects of personality are fairly well established at about the sixth year of the individual's life. Nevertheless one may question whether the factors selected as predictors are necessarily those which are little modified in the individuals later life. Answers to this question can be obtained only when the validity of the predictors selected has been established empirically" (15,p.6-7).

2. Will the Glueck Scale based as it is on the control of ethnic origin (the majority of the boys in the Glueck research were of Irish, Italian and English descent) predict delinquency among boys of different ethnic derivation?

3. Will the Glueck table apply as well to an independent sample of cases of somewhat higher intelligence than the group on which it was originally constructed? In relation to this question as well as the two preceding, Messrs. Shaplin and Friedman doubt that the Glueck Social Prediction Table can actually identify non-delinquents and persistent delinquents because the subjects of the Glueck sample are not representative of the general population but are "below the general average of intelligence are from underprivileged areas where high delinquency rates prevail, and are not representative of

the ethnic distribution of the general population". (21, p.545).

4. Will the Glueck Table apply to a sample of boys from families of better economic status than those on whom it was originally based?

5. Will the Glueck Table, based as it is on boys who lived in bad neighbourhoods, predict delinquency of boys living in better communities?

Professor Paul W. Tappan, for example, asks: "To what extent may a highly selected group of matured, persistent and incarcerated adolescent offenders from underprivileged areas of Boston, characterized by certain norms of ehtnic background and of intelligence, be employed to predict delinquency among unselected children of other communities?" (23, p. 1023-1029)

Mr. Sol Rubin comments: "Both delinquents and non-delinquents were selected from poor neighbourhoods for a simple reason - these are high delinquent areas. The Social Prediction Table, however, says nothing about areas! Is this table applicable to all kinds of areas? Hardly. One could, for example, select from good and poor neighbourhoods, children who meet the conditions of overstrict or erratic discipline of boy by father, unsuitable supervision of boy by mother, indifferent or hostile father and mother and unintegrated family. Would this test

be equally effective in predicting delinquency for both groups? Possibly not. It has not been tried." (20, p.111)

Further, Shaplin and Tiedman, in their analysis of the Glueck Scale point out that the number of delinquents on whom the Gluecks scored all five factors constitute approximately half of the sample (i.e. 451 out of 1,000 boys). Because of this so called "restriction" they conclude that "the Table is valid for only those populations in which the number of juvenile delinquents is approximately 500 per 1,000. (21, p.546).

VALIDATION STUDIES ON THE TABLE

The problems raised by the critics of the prediction table seem to have in common the question of the validity of the Prediction Scale when applied to independent samples of juvenile delinquents. The first such validation study appeared in the spring of 1952. Bertram J. Black and Selma Glick (2) applied the table to a group of 100 Jewish boys confined in the Hawthorne-Cedar Knolls School in New York State, with a view to determining the extent to which it would have been possible to have identified them accurately as potentially serious delinquents. Black and Glick ascertained that 91% of the group would have been thus identified. The Gluecks note (8,p.10) that this study is of significance in that the Scale seems to work equally well with Jewish boys as with those of the original sample comprised largely of English, Italian and Irish ethnic groups.

In the same year another study by Richard Thompson (25) purportedly established the Social Prediction Scale as a valid instrument for distinguishing persistent delinquents from children who are showing temporary maladjustment. This study, using a representative group of 100 boys, originally from the Cambridge-Somerville Youth Study (18), showed that it would have been possible to identify accurately 91% of all the boys as either persistent delinquents or true non-delinquents. This study, too, claims to show the validity of the Scale using boys of different socio-economic status and background from that of the boys in the original sample. The boys in Thompson's sample were generally younger, more intelligent, of different ethnic origin, slightly better economic status and from better neighbourhoods.

Two unpublished studies by the authors mentioned above, as reported by the Gluecks (9,pp.24-26), applied the Table to female offenders. The Jewish Board of Guardians completed a study on 150 Jewish unmarried mothers who were classed as persistent delinquents and found that the Social Prediction Table would have identified 81% as delinquents. Thompson applied the table to 50 girls committed as delinquents to the Division of Youth Service of the Massachusetts Department of Education over a seven month period from November, 1954 to May, 1955. The results of this study show that all (100%) of the girls would have been identified as potential delinquents. The Gluecks comment: "This is a finding which we can only explain by the fact that there is much more social

pathology in the background of the delinquent girls than that of the delinquent boys to whom the Table has been thus far applied." (9,p.5)

Another unpublished study by Thompson - reported elsewhere by the Gluecks - was completed in 1954 (8,p.11). He applied the Table to a random sample of 50 boys appearing before the Boston Juvenile Court in 1950. These boys averaged 13.1 years of age (compared with 14.6 as an average age for the boys in Unraveling Juvenile Delinquency). He found that it would have been possible to determine that 92% of these boys would become persistent delinquents. These boys, too, differed from the original sample. Not only were they younger, but their religious distribution was different, a higher proportion being Protestant than in the original group. Further differences included less retardation in school, and a far higher proportion of one or both parents attending high school.

Another opportunity for testing the validity of the Social Prediction Table came in 1954 when the Douglas A. Thom Clinic for Children in Boston (a psychoanalytically oriented clinic) applied the table to 57 boys ranging in age from 6 to 12 years who had been treated for aggressive, destructive and antisocial behavior (19, pp. 194-214). The scoring made by the clinical psychologist indicated that 82.3% of these boys would have been clearly identified by the Table as potential delinquents.

Still another check on the Social Prediction Table was published in April 1955 (5). This is a study made by the Department of Institutes and Agencies of the State of New York in which the table was applied to 51 delinquent boys who were on parole. A table of comparisons of results for this group compared to those for the Glueck group is given as follows (5, p.10):

TABLE IV

TWO CLASS PREDICTION TABLE FROM FIVE FACTORS OF SOCIAL BACKGROUND OF DELINQUENT BOYS

Weighted Failure Score Class	Unraveling Juvenile Delinquency	New Jersey Study
	%	%
Under 250 (little likelihood of delinquency)	14.2	19.6
Over 250 (great likelihood of delinquency)	85.8	80.4
Totals	100.0	100.0

Quoting from the New Jersey Report:

"It will be observed that the closeness of the findings on the basis of the New Jersey Data with the original findings in the study 'Unraveling Juvenile Delinquency' is rather noteworthy, since the New Jersey boys were selected at random, and no attempt was made to match the individual characteristics of

"the New Jersey delinquent boys with the delinquent boys included in the original studies." (5,p.9)

Two more important validation studies of a different type are currently in progress. A preliminary report on one is given by Ralph W. Whelan (26). This experiment is being carried out by the New York City Youth Board, applying the Table to about 250 boys in the first grade of two public schools in high delinquency areas in the Bronx. The boys' behaviour in school is being followed and it is planned to extend the follow-up to home and community. This experiment has been in progress since 1953 and is presently in midstream. It will be several years before the results are definitive.

The other application of the Social Prediction Table to first grade children is being carried out in Washington D.C. under the sponsorship of the Commissioners' Youth Council of Washington D.C. and is known as the Maximum Benefits Project (8,p.12). It is set up in two elementary schools in high delinquency areas in Washington. The Social Prediction Table is being used to identify the potential delinquents among a group of children reported by teachers ashaving "behaviour difficulties". Of such a group 75% were rated as true pre-delinquents. They are being followed up and some of them (as in the New York City Youth Board Study) are under treatment. It is, of course, too soon to speak of "results".

LIMITATIONS AND POSSIBLE USES OF THE TABLE

On the weight of the validation studies so far completed and from the work in progress, the Gluecks appear satisfied as to the validity of their Prediction Table. The question the Table is designed to answer is this; "Is the particular child about whom I am concerned probably a persistent delinquent or likely to become one?" (8,p.12) Satisfied that their Table supplies a fairly accurate answer to this question the Gluecks have recommended its widespread use. They do, however, make this qualification:

> "Prediction tables are not to be applied mechanically as a substitute for clinical judgment. Such tables, however, should help the teacher, the social worker, the clinician, the juvenile court judge, and the probation officer to evaluate a particular child in the perspective of organized experience with hundreds of children who, in many crucial respects are like the one in question. Used properly, this instrument can open the way for dealing more directly with the root causes of delinquent behaviour than has thus far been possible." (8,p.13).

With this reservation in mind the Gluecks go on to discuss the various uses for the Social Prediction Table:

> "As regards uses of the Table once signs of maladapted behaviour are clear, the reader is reminded of Thompson's findings in applying the

"Table to the Cambridge-Somerville Youth Study cases. The boys in this group were all "behaviour problems" to their teachers: but the Table correctly distinguished 90 per cent of those who were true delinquents from those who were really non-delinquents. This means that if the child is showing signs of what appears to a teacher, or social worker, or police officer, to be evidence of true predelinquency, the table would be helpful in arriving at a decision on the matter.

"What of the other uses of the Social Prediction Table in a juvenile court? Not all children with some prior record of offences are necessarily headed for persistent careers of delinquency. And some children, though labelled "minor offenders" may be serious delinquents. The Social Prediction Table applied here would certainly serve as an aid to juvenile court judges and probation officers in separating minors from serious offenders.

"Much more could be said about the possible uses of the Table. Only its further experimental application will reveal its full potential". (8,p.13)

THE PROPOSAL OF A NEW USE FOR THE TABLE

The purpose of this thesis is to suggest a possible new use for the Glueck Social Prediction Table. This new application of the Table that is proposed for investigation is the possibility of its usefullness in determining recidivism among young adult offenders (ages 16 to 24) from an Alberta gaol population.

I REASONS FOR THIS PROPOSAL

At first blush, this proposal would seem to be taking rather extensive liberties with a test which was originally designed to detect potential delinquents at the 6 year level. There are two major points which must be considered here. First, while the Gluecks had originally hoped that the Table would show predictive powers from about age six to sixteen, the majority of the validity studies that have been done have been in the range of 10 years to 17 years. The only exceptions to this, are the two studies not yet completed by the New York City Youth Board and the Maximum Benefits Project of Washington, D.C., and as we have previously pointed out no results on these last two studies are available. Thus the actual age limits for the test have not yet been established. That it may be useful in the middle range (age 9 to 16) is now generally accepted; whether it will be applicable to thoseover 17 has not yet been tried. It might be argued that the Scale, based as it is largely on the family life, would not be applicable

to older boys because the role of the family is at that age, decidedly less important in influencing an individuals behaviour than such other influences as peer groups and the general social milieu.

While this can be granted it must be remembered that the question to be answered by the Table is whether the individual studied "is likely to become a delinquent". At what age this antisocial behaviour becomes apparent is not restricted. The argument might be that the family influences measured by the Table determine the individuals "predisposition" to criminal behaviour, and whether this disposition becomes an actuality or at what age it becomes an actuality may well be determined by the individuals later social interactions and perhaps following the theory of "differential association" (22,p.74-82) or from some other social phenomena. In any event the test of validity for this age group is an empirical one and not theoretical. (While the empirical results of this study may have certain theoretical implications regarding the family influences that act on or "predispose" older boys in influencing their social behaviour it is beyond the scope of this thesis to speculate on what these issues may be. However, Dr. Eleanor Glueck notes (8,p.13) that research is presently being conducted at the Thom Clinic for Child Guidance in Boston in an attempt to determine what the meaning of the factors in the Social Prediction Table is in the dynamics

of delinquency).

The second problem we must consider in suggesting this new use for the Glueck Social Prediction Table is that the proposal is for testing recidivism of delinquents rather than a potential for delinquency. The difference here is more apparent than real and requires consideration of two points. First, the Gluecks in setting up their scale for spotting potential delinquents have given us a definition of delinquency which contains in part the following:

> "For the purpose of the present study, delinquency refers to <u>repeated</u> (#) acts of a kind which . . .. are punishable as crimes (either felonies or misdemeanors) - except for a few instances of persistent stubborness, truancy, running away, associating with immoral persons and the like. Children who once or twice during the period of growing up in an excitingly attractive milieu steal a toy in a ten cent store, sneak into a subway or motion picture theatre, play hooky and the like and soon outgrow such peccadilloes are not true delinquents even though they have violated the law." (11,p.11)

Underlining mine.

Compare this for instance with the definition given in the Criminal Code of Canada under The Juvenile Delinquents Act, 1929, c.46 s.1.

> "'Juvenile delinquent' means any child who violates any provision of the Criminal Code or of any Dominion or provincial statute, or of any by-law or ordinance of any municipality, or who is guilty of sexual immorality or any similar form of vice, or who is liable by reason of any other act to be committed to an industrial school or reformatory under the provisions of any Dominion or provincial statute." (3,p.421)

Technically, any child who commits even a single minor set in violation of the law is a delinquent. However, the Gluecks were more concerned with these who repeatedly or "persistently" committed such acts.

Thus we have them in later articles speaking of the Social Prediction Table as measuring "Likelihood of Persistent (#) Delinquency" (8)(9)(10).

This might mean that not all first offenders would be considered delinquents according to the Glueck definition and usage of the term "delinquent". However, second, third and fourth offenders would be more likely to be so classed.

Underlining mine.

Recidivism is defined as:

"the repetition or recurrence of delinquent or criminal conduct. (Some authorities limit the term to cases in which recurrence leads to a second conviction or commitment." (6,p.444)

Thus in a sense when we speak of 'recidivism' we mean much the same as when the Gluecks speak of 'persistent delinquency'. And if the test is designed to measure a potentiality for persistent delinquency then it might also be used to determine a potentiality for recidivism.

II STATEMENT OF THEPROBLEM

If the Table is to be used to determine recidivism among young adult offenders for this Alberta Gaol population we must establish whether or not the test can differentiate between known classes of offenders in this population. If scores of over 250 are obtained progressively more frequently by second, third, and fourth (or subsequent) offenders then we would have evidence to contend that the Table can differentiate between these classes of offenders. A test of this hypothesis represents the major problem of this thesis. The argument would be that individuals who score over 250 are likely to be "persistent" offenders or recidivists. If the Table can differentiate between classes of offenders then we would expect that known fourth or subsequent offenders would nearly all have scores of over 250; third offenders would

probably have a lower percent but still relatively high number obtaining scores of over 250; second offenders would have a still lower percent scoring over 250; and first offenders should have the lowest percent of scores over 250;

If, on the other hand, the Table can not differentiate between the classes of offenders then we should expect that roughly the same percent of first, second, third and fourth or subsequent offenders would obtain scores of over 250.

A secondary problem that can be dealt with by these data is this: If the Glueck Table can differentiate between the various classes of offenders, can it do so as well for the older offenders as for the younger offenders in our sample? A statement of the hypothesis for this problem might be as follows: The ability of the Glueck Social Prediction Table to differentiate between known classes of offenders (i.e., first, second, third, etc.,) is not affected by the different ages of those offenders (within the age limit 16 to 24). A test of this hypothesis will be the second and minor problem of this thesis.

DESCRIPTION OF THE SAMPLE

The Glueck Social Prediction Table was administered to 140 young adult male offenders incarcerated in the Bowden Rehabilitation Institute of Alberta located at Innisfail, Alberta. This represented the total popultation of young adult offenders at Bowden at the time the Table was administered. The popultation of Bowden Institute is only a somewhat representative sample of the total population of young adult male offenders of the Province of Alberta. The Institute is set up to handle the rehabilitation of selected young offenders, age 16 to 24, who have been sentenced to custody in a gaol or institution by the courts of Alberta. Selection of these candidates is flexible and criteria for admission are not rigid. Preference is generally given to young first offenders. Individuals with extensive criminal records or penitentiary records are usually not considered. Neither are individuals with sentences of less than three months or more than two years. Particularly difficult individuals who may be liable to escape or cause trouble are generally eliminated, as are individuals with severe emotional problems and mental defectives. While this may give the appearance that inmates at Bowden represent only the better individuals or those most amenable to reform, it must be remembered that a good many young adult offenders receive probation rather than a gaol sentence. This means

that the group of prisoners at Bowden may represent a sort of mid-sample of the total population of young adult male offenders in Alberta. The extremes of incorrigible offenders (who are not recommended) and the best rehabilitation prospects (who generally manage to receive probation or suspended sentence) are not included. And if the two extremes mentioned above balance each other off, then the Bowden inmates are a representative but restricted sample of the entire population of young adult male offenders in Alberta.

The original 140 inmates interviewed were further subdivided into four categories in relation to their recidivism. Thus we have first offenders, second offenders, third offenders and those with four or more offences. This division was made on the basis of official court records and does not include any offence for which the individual may have been guilty but for which he was not tried and convicted. For example, an individual who may have been pilfering goods from department stores for years and is finally convicted and sentenced on say a charge of possession of stolen goods would be classified as a first offender along with some individual who is convicted the first time that he ever violates a law. (#)

This arbitrary classification according to official convictions, however, did not include convictions for minor traffic offences or liquor offences resulting in small fines. While these might be officially classified as offences it was felt that (in the Glueck tradition) they could be discounted as indicative of persistent criminal behaviour, and considered more as 'situational hazards' into which many otherwise law-abiding citizens occasionally fall.

While this is a somewhat arbitrary system it is the simplest and most feasible method of determining recidivism for the purposes of this study. If one was to take the word of the individual on how many offences he had actually committed, it would be necessary to have some check on the completeness or veracity of his statements. This would be a most difficult task in a prison environment.

It must be pointed out that this sub-division of offenders was carried out after all data and interviews had been completed. At the time of the interview and completion of the Social Prediction Scale the author had no knowledge of whether he was interviewing a first offender, second offender, etc. The reason for this was to prevent any bias from entering into the scoring of the Table.

The division of the 140 inmates gave the following results:

First offenders	40
Second offenders	49
Third offenders	39
Fourth or more offenders . .	12
Total	140

One may wonder at the large proportion of first offenders in this group. Usually an individual has had several contacts with the law before he is incarcerated in a gaol. The usual gamut of fines, suspended sentence,

probation, etc. are tried first and as a last resort the individual is committed to an institution. This is not always the case in Alberta, however. Many offences do not have the option of a fine, and probation cannot be granted by the judge for diverse reasons. It therefore turns out that many young offenders involved in a serious breach of the law for the first time find themselves incarcerated in the Bowden Institute. Second and subsequent offenders usually had a previous record of probation, fines, or short gaol sentences.

In presenting the statistics on our sample we shall show the break down into these four categories of offenders in all the tables.

The range of ages of this sample was 16 to 25 inclusive with a majority in the 17 to 21 year age group. The mean age of this sample was 19.48 + 2.2 (compared with 14.65 + 1.6 in the Glueck sample) and distributed as shown on the following table.

TABLE V

Age	Age of Offender at Time of Interview				
	1st offence	2nd offence	3rd offence	4 or more offences	Totals
16	2	4	3	2	11
17	4	7	5	1	17
18	8	13	10	2	33
19	7	3	4	2	16
20	3	4	7	4	18
21	6	7	3		16
22	4	2	3		9
23	4	6	3		13
24	1	2	1		4
25	1	1		1	3
Total	40	49	39	12	140

The mean Intelligence quotient for the 140 Bowden boys was found to be 101.36 with a standard deviation of 11.18. The range extended from 60 to 128. This was using the Revised Beta Group Intelligence Test with the Lindner-Gurvitz Standardization so that the I.Q. arrived at is similar to that of the Wechsler-Bellevue. A comparison of the Beta results on the Bowden youths with that of the Wechsler results on the Glueck group is given in Table VI

TABLE VI

MEAN I.Q. OF BOWDEN GROUP COMPARED TO THE MEAN I. Q. OF THE ORIGINAL GLUECK SAMPLE OF DELINQUENTS

Test Used	Bowden Group	Glueck Group		
	Beta Group I.Q.	Wechsler - Bellevue I.Q.		
		Performance	Verbal	Full Scale
Mean I.Q.	100.36	97.22	88.56	92.28
S. D.	11.18	13.36	14.55	13.26

It would initially appear that the present sample is of considerable higher intelligence than the Glueck sample but allowance must be made for the differences in the two tests. The Beta probably corresponds more closely to the Performance Scale of the Wechsler-Bellevue and here we notice that the differences in intelligence are less striking. The educational level of the Bowden group was not very high with little better than one quarter of the boys having an education higher than grade 9. The average educational level reached in school was grade 8 (8.28) and the distribution was as shown in Table VII.

TABLE VII

EDUCATIONAL LEVEL OF BOWDEN GROUP

Grade in School	1st offence	2nd offence	3rd offence	4 or more offences	Totals
2		1			1
3			2		2
4	1				1
5	4	3		1	8
6		7	5	1	13
7	5	7	6		18
8	9	11	11	3	34
9	7	6	9	4	26
10	6	7	4	1	18
11	5	4	1	2	12
12	3	2	1		6
University		1			1
Totals	40	49	39	12	140

A majority of the boys were single although 17 out of the 140 had been married prior to their sentencing and one boy was married while in prison. The distribution is shown in Table VIII.

TABLE VIII

MARITAL STATUS OF BOWDEN GROUP

Status	1st offence	2nd offence	3rd offence	4 or more offences	Total
Single	36	43	34	9	122
Married	4	6	5	3	18
	40	49	39	12	140

Since most of the boys had not gone beyond grade nine in school many of them had had some working experience or started on an occupation or in a career in the Armed Services. Still, a majority of those working had done nothing more involved or advanced than unskilled labor or farm work.

TABLE IX

OCCUPATIONAL STATUS OF BOWDEN GROUP

Occupation	1st offence	2nd offence	3rd offence	4 or more offences	Totals
Unskilled Labor	18	20	21	6	65
Student	9	3	4	4	20
Farming	4	9	3	0	16
Skilled Labor	4	5	4	1	14
Clerical	0	4	5	0	9
Mechanics	1	4	1	0	6
Armed Services	3	1	0	0	4
Sales	0	1	1	1	3
Unemployed	1	2	0	0	3
Totals	40	49	39	12	140

The twenty inmates listed as students had been attending school prior to their arrest and had had no extensive employment experience other than working in grocery stores;

as part time clerks; on paper routes, etc.. A majority of those in unskilled labor had as their major source of employment construction work which, because it is seasonal in nature, meant that they were unemployed a good part of the winter months.

Religious affiliation of the Bowden offenders showed a majority belonging to the Roman Catholic Church followed by United and Anglican churches and the rest of the denominations in a somewhat rough correspondence to their popularity with the general population. Not too much can be gained from this table due to the fact that many of the boys merely stated the affiliation of their parents because they themselves did not attend any church regularly. An attempt was made to determine their church attendence but with generally vague answers like "occasionally" or "when I had to" this inquiry was abandoned.

TABLE X

RELIGIOUS AFFILIATION OF BOWDEN GROUP

Religion	1st offence	2nd offence	3rd offence	4 or more	Totals
Roman Catholic	13	23	18	5	59
United	11	12	8	5	36
Anglican	7	5	3	1	16
Lutheran	2	5	3	1	11
Presbyterian	3	3			6
Greek Orthodox	3				3
L. D. S.			3		3
7 Day Adventist		1	1		2
Baptist			2		2
Church of Nazarene			1		1
Christian Reform	1				1
TOTALS	40	49	39	12	140

Nearly all of the Bowden group were born in Canada and over 60 per cent were born in Alberta. Only 8 out of 140 boys stated that they were foreign born (4 of these 8 were born in Hungary and had come to Canada in 1956, the other 4 had been in Canada for longer periods of time.)

TABLE XI

PLACE OF BIRTH OF BOWDEN INDIVIDUALS

Place	1st offence	2nd offence	3rd offence	4 or more	Totals
Alberta	22	31	27	7	87
Other Provinces	13	17	11	4	45
U. S. A.	0	0	0	0	0
Foreign	5	1	1	1	8
Totals	40	49	39	12	140

Although nearly all the boys were Canadian born and hence classified as Canadian they came from a wide diversity of ethnic origins. While a majority of the boys in the Glueck study fell into the categories of English, Italian and Irish in that order, the majority of the Bowden group fell into the ethnic classes of Scotch, English, German and French, respectively. Ethnic origin was assigned according to the paternal origins of the boy with the exception of the so called "half-breed Indians". In this case if either parent was of Indian descent then the boy was placed in this category. (Both parents had to be Indian in order for the boy to be placed in that category.)

TABLE XII

ETHNIC ORIGIN (PATERNAL) OF BOWDEN INDIVIDUALS

Nationality	1st offence	2nd offence	3rd offence	4 or more	Totals
Scotch	7	8	6	5	26
English	5	4	6	1	16
German	3	6	5	1	15
French	4	6	4		14
Irish	4	4	4	1	13
Indian	4	3	4		11
Half-Breed Indian	1	4	2	2	9
Ukrainian	3	2	2	1	8
Danish		3	2	1	6
Hungarian	1	2	1		4
Dutch	3		1		4
Swedish	1	2			3
Austrian	2	1			3
Negro		1	1		2
Russian	1				1
Polish		1			1
Chinese	1				1
Jewish			1		1
Not Known		2			2
Totals	40	49	39	12	140

In order to get a rough estimate of the socio-economic level of the family from which the boy came, data were obtained

about the occupation of the father or chief wage earner in the family and also the education level of the father. This will only give a very rough estimate of the socio-economic level of the family but more complete data in this respect were too difficult to obtain.

TABLE XIII

OCCUPATION OF FATHER OR CHIEF WAGE EARNER

Occupation	1st offence	2nd offence	3rd offence	4 of more	Totals
Common Labor	15	16	12	2	45
Semi-Skilled Labor	5	8	3	3	19
Skilled Labor	3	4	5	3	15
Farming	8	11	8		27
Military		1	5	2	8
Clerical	1			1	2
Sales	1	1	1		3
Managerial	3	1	1	1	6
Self Employed	1	1	1		3
Tradesmen	2	1			3
Ministerial		1			1
Unemployed		1	2		3
Not Known	1	3	1		5
Totals	40	49	39	12	140

TABLE XIV

EDUCATIONAL LEVEL OF FATHER
(from probation reports and prison records)

Education - Grade	1st offence	2nd offence	3rd offence	4 or more offences	Totals
Not Known	2	10	4	5	21
Nil	4	7	6	1	18
2		1	1		2
3	5		1	1	7
4	2	2	2		6
5	1	1	4		6
6	1	2	1	1	5
7		2	5		7
8	6	9	7	1	23
9	7	6	2		15
10	5	3			8
11	5	2	1		8
12	1	2	3	1	7
University	1	2	2	2	7
Totals	40	49	39	12	140

Inspection of these two tables reveals that a majority of the families were probably in the lower socio-economic levels with a majority of the fathers doing labor work or farming. This shows, too, that of the total sample, a little less than 20 percent of the boys were from rural districts compared with over 80 per cent coming from urban environments.

While most of the occupations are in the lower economic levels there is some representation of boys from families in the middle class and higher socio-economic levels. One boy, for instance, came from a very prominent family whose father was an executive in a large oil firm and earning more than $25,000 a year. About 5 percent of the boys had one or more parents with a University degree. The average education of their father, however, was around grade 7. On the other extreme over 15 percent of the fathers had no formal education at all.

Further data on the Bowden group was collected to determine the number of children in each family and the rank of the offender in his family. Any interpretation of these two tables must be done with care and reservations. The number of children in the family for instance may serve as a further help in determining the economic level of the family. When, as the next table shows, almost 20 percent of the boys came from families having eight or more children one might assume that available finances in these families were severely restricted - especially if the father was working seasonally as an unskilled laborer.

TABLE XV

NUMBER OF CHILDREN IN FAMILY OF BOWDEN OFFENDERS

Number	1st offence	2nd offence	3rd offence	4 or more offences	Total
1	3	3	2	2	10
2	6	9	4	1	20
3	2	3	7	4	16
4	7	8	5	2	22
5	6	6	7	2	21
6	5	4	5	1	15
7	4	5	1		10
8 or more (to 18)	7	11	8		26
Total	40	49	39	12	140

TABLE XVI

RANK OF BOWDEN OFFENDER WITHIN HIS FAMILY

Order of Children	1st offence	2nd offence	3rd offence	4 or more offences	Totals
Only	3	3	2	2	10
Oldest	16	12	14	3	45
Youngest	4	11	3	1	19
Midchild	17	23	20	6	66
Total	40	49	39	12	140

The above table must, likewise, not be interpreted carelessly. It is noted that a number of the offenders (32%) are the eldest child in the family and this figure

is even more impressive when it is remembered that over 50 percent of the families had 5 or more children. While it has been occasionally suggested in psychoanalytic circles (12) that the oldest child is more prone to anti-social activities - for various obscure reasons - it must be pointed out that the statistics obtained here with the Bowden group is generally more the exception than the rule. Table XVII shows a comparison of the Bowden group with that of the oroginal Glueck group (the latter of which is the more usual).

TABLE XVII

A COMPARISON OF THE BOWDEN GROUP AND THE GLUECK GROUP IN RELATION TO RANK OF BOY IN FAMILY

Rank of Child	Bowden Group Number	Bowden Group Percent	Glueck Group Number	Glueck Group Percent
Only Child	10	7.1	24	4.8
First Born	45	32.1	78	15.6
Middle	66	47.2	300	60.0
Youngest	19	13.6	98	19.6
Total	140	100.0	500	100.0

The final table - to complete the available data we have showing us what the Bowden inmates look like - gives the data regarding the nature of offences for which these individuals were committed.

TABLE XVIII

THE NATURE OF OFFENCE FOR WHICH THE BOWDEN INDIVIDUALS WERE INCARCERATED

Offence	1st offence	2nd offence	3rd offence	4 or more offences	Totals
Breaking & Entering	21	23	12	4	60
Theft	2	9	7	2	20
Car Theft	4	6	5	4	19
False Pretences	2	5	3		10
Forgery	4	2	3		9
Contributing	1	1	2	2	6
Assault	3	1	1		5
Robbery	2	1	1		4
Indecent Assault			2		2
Possession		1	1		2
Arson			1		1
Joy Riding	1				1
Driving Suspended			1		1
Totals	40	49	39	12	140

While the above tables are by no means a complete dissection of the make-up of the Bowden inmates, they supply us with a general picture of the nature and background

of the individuals in this sample. If we were to create an 'average' or typical inmate from this sample, an interesting but not very accurate picture like this would result. He would be age 19, single, have a grade 8 education and an I.Q. of 101. His chief occupation would have been unskilled laborer. His religious affiliation would be Catholic or United although he only went to church "when he had to". He would have been born in Alberta of Scotch descent. His father is probably employed as an unskilled laborer and hasless than a grade 8 education. He lives in a city, probably in a low rent area. He is amiddle child in a family of 5 or more and he is in gaol for breaking and entering the neighborhood store.

This "typical" Bowden inmate and 139 of his compatriots, then, were interviewed and scored on the Glueck Social Prediction Table.

ADMINISTRATION OF THE TABLE

The Glueck Social Prediction Table was scored and other pertinent information gathered during private interviews with each of the boys. These interviews took place in a private room set up especially for this purpose. There were no guards or other persons present or within hearing at the time of the interviews. These interviews were all confidential and voluntary. Length of interviews varied depending upon how difficult it was to establish rapport, but usually averaged between one half hour and an hour. Information that could be verified from the official records of the Institution was checked after the interview.

I DIFFICULTIES OF PRISON INTERVIEWING

Establishing Rapport. Conducting interviews and obtaining data in a prison environment is usually a difficult task at best. Establishing rapport is one of the crucial hurdles to be overcome. However, conducting the interviews at Bowden was not as difficult as in some other gaol settings. There were several reasons for this. First, the majority of Bowden inmates were experiencing their first time in gaol. Their previous convictions, if any, had usually been probation or fines. For this reason they were still somewhat naive compared to more "hardened" criminals. The general dictum of prisoners to "never volunteer for anything especially giving information" had not been inculcated

into their attitudes.

Secondly, they had not been subjected to extensive and repetitive interviews on the same material from numerous previous commitments, or contacts with social agencies, rehabilitative organizations, prison social workers, etc.. To this extent the interviews represented a relatively new experience for a majority of the boys and they did not enter the interview situation with preconceived ideas, attitudes and/or answers.

A third point that proved quite important is that the interview generally proved rewarding to the individuals - which was crucial in maintaining rapport. The reason for this is that it represented a chance for them to ventilate their feelings and discuss themselves in a non-authoritarian setting. At the Bowden Institute there are no treatment-oriented workers who function independently of the disciplinary aspectsof the institution. For this reason most of the boys are unwilling to discuss personal or family affairs because of fear of repercussions and/or the knowledge that any information so divulged will become part of their official record. (This reluctance stems from a common prison attitude of noncooperation with the gaol administration.) This noncooperation is one of the more important characteristics of inmate behaviour in most correctional institutions.

A fourth point relating to the reward value of the interview for the inmate was the studied attitude on the part of the interviewer to treat each inmate as an individual and not just as another prisoner. While this required more time than is usually needed to obtain the necessary information it was advantageous in maintaining rapport. This meant that information was obtained in a different manner from each boy and the inmate usually set the pace of the interview. It also required that the interviewer occasionally listened to long monologues that were completely irrelevant to the material needed. This however, had the advantage of allowing theprisoner to ventilate some of his feelings and of giving him the attitude that the interviewer was genuinely interested in him as an individual with unique problems, aspirations and personality.

Distortion and Dissention. A second difficulty in prison interviewing is concerned with possible sources for distortion and deception. Many of the attitudes that one encounters in a more stable environment like that of the penitentiary are not present in open institutions like Bowden. The transitory nature of the Bowden population probably prevents the establishment of permanent well defined attitudes and behaviour standards. Again the fact that most of the boys there were in gaol for the first time and not in contact with older more institutionalized inmates also prevented the rigid formulation of these

attitudes. However, the interviewer tried to be aware of the many problems encountered in prison interviewing and manipulated the interviews as best he could in order to eliminate them. In general the procedures followed were those suggested in the highly informative article, "Sources of Distortion and Deception in Prison Interviewing" by Norman Johnston (13)(#).

The major manipulations required in the interview in order to avoid these distortions and deception, stemmed from the knowledge that the interview itself is not carried out in isolation, but must be seen in its institutional context. This institutional context includes three significant factors: first, the general suspiciousness of inmates regarding personal interviews which are usually associated in his mind with police inquiries (sometimes to the third degree) or with some breach of discipline within the gaol; secondly, the fact that these personal interviews add a new element to the usual monotonous procedures of the institution; and thirdly, because of this, and the consequent aroused interest and/or suspicion, the prison "grape-vine" must be considered. In this aspect the first few interviews are crucial. It is necessary to allay suspicions, arouse interest and present some satisfaction to the first interviewees because of the knowledge that their

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Careful consideration was also given to the techniques discussed in Donald Newman's article "Research Interviewing in Prison" (16).

attitudes and opinions will soon become known among the "prison community" and will to a large degree determine the attitudes and consequently the success of subsequent interviews. For this reason more care was exercized in selecting and interviewing these first candidates than was necessary for the remainder of the interviews. Inmates with whom previous rapport had been established and who were generally amenable or enthusiastic about "psychological interviews" were given first consideration. Inmates who were generally popular, "big wheels", or respected by the other inmates we tried to place in the earliest interviews. The purposes and limitations of the interviews were carefully explained to them and extreme care was taken not to ask "a bunch of stupid questions".

Their approval was sought and their opinions were given apparent careful consideration. With this accomplished the "grape-vinee" usually took care of the rest and only occasionally would subsequent inmates come into the interview room not knowing who the interviewer was, what kind of interview was conducted, the apparent reasons for these interviews, and the general nature of the questions that would and would not be asked. Once the suspicions of the inmates regarding the interviews had been allayed, the interviews usually proceeded without difficulty.

The general context of the initial introduction was

as follows: (It must be remembered, however, that the interview and line of approach was varied somewhat with the different individuals interviewed. Some required more complete explanations and some were willing to begin with only the minimum of introduction).

II. INTRODUCTION TO THE INTERVIEW

After a few introductory remarks and some irrelevant conversation when the inmate first entered the room, the interview was introduced in some variation of the following:

"My name is Park Davidson and I am a member of the Prisoner Selection Committee. As you know you are usually interviewed by one of the membersof this Committee before you are selected for transfer to Bowden. Recently the Committee has decided to check upon and possibly improve its selection procedures in order to be sure that only the best and most suitable candidates are transferred to Bowden. One of the best ways to be sure of this, we felt, was to interview all the inmates who are presently in Bowden so that we will have some comparison to use in selecting future deserving and suitable individuals."

(Optional) "Any comments or suggestions you would care to make at the end of this interview will be greatly appreciated."

(While the above may appear rather obvious to the more sophisticated reader, it was generally

found satisfactory in breaking down the barriers for an effective interview).

At this point the interviewer usually paused to light a cigarette and offer one casually to the interviewee. There were definite reasons for this little procedure. Usually the inmates were not permitted to smoke tailor made cigarettes and aside from the small reward value involved it was a slight technique used to show the inmate that the interviewer was not one of the staff members or a "stoolie" of the Warden. (This small violation of rules waskindly overlooked by the Warden.)

> "As you know, I do not work on the Bowden staff and am not responsible to the Warden to divulge any information you may care to give me. I assure you that anything discussed here will be held in strictest confidence and will in no way affect your sentence, remission time, discipline or chances for parole. As I stated earlier we are merely gathering information to help us in continuing to select the best individuals for tranfer here."

(While it was necessary to be dissociated from the Bowden staff and its disciplinary or punitive aspects it was also necessary to point out that no favors or help could be offered the individual for such things as parole. The reason for this wasto prevent the inmate

(from 'sugar-coating' his story in the hope that it would enhance his chancesof an early release.)

"A lot of the questions I will ask you have probably been asked before but I don't have access to your files here at Bowden so I'll have to get all my information from you. Now, your age is . . . ?"

(While this last statement was not the complete truth, it was made for two reasons; first, to further allay any suspicions or resistance, and secondly, to get a rough check of the veracity of the inmates statements when they were later actually checked against his personal file. This checking was not done until after all the interviews were completed in order to prevent any discovery and consequent damage from this small untruth.)

The interview then proceeded with relatively simple factual questions and as rapport was established the questions gradually became more probing and comprehensive. A lot of irrelevent data was collected and recorded along with the pertinent information - both in keeping with our original introduction and to prevent, as far as possible, the inmate from discovering which parts of the interview were most important and what its real purpose was. The interview was terminated in the usual procedure (14,p.233-253) and after the inmate had left the room the Glueck Scale was scored - on the basis of information obtained - before

the next individual was called.

III THE "INTERVIEW TECHNIQUE" OF SCORING THE TABLE

This brings us to a major problem in the administration of the Table. The usual procedure and the one followed by the Gluecks was to complete the scoring not only on the basis of the boys' own story but also with consideration of a social worker's report made after visiting the family of the boy concerned.

While a majority of the validation studies done to date also had some of this additional information, at least one of the studies (the Thom Clinic for Children in Boston op.cit) was scored by a clinical psychologist on the basis of the individuals statements and attitudes alone. The major reason for not conducting this further inquiry was, of course, the near impossibility of interviewing all the parents with the limited facilities available for this thesis. However, one might argue that the 'perceived' attitudes and actions of the parents (as scored on the Glueck Table) are more important in determining the individuals subsequent actions than what those parental actions and attitudes may actually be. For instance, if one were to interview the mother of one of these boys and find that she had genuine feelings of affection for the boy this would result in a low failure score on the Glueck Table. However the boy might not perceive these maternal actions as being affection but might view them instead as hostility

or indifference and consequently deserving a high score on the Glueck Table under this factor. Which of these to accept may prove somewhat of a problem but the resolution should probably be in favor of the boy's perceived attitudes, because his reactions to these are what determine his behaviour in this respect. Thus, with the type of questions that constitute the Glueck Table, it was felt that the information obtained only from the boy would prove sufficient. This preference for accepting the perceived conceptions of the individual is concurred with by Dr. Jacob Chawst in his article "Perceived Parental Attitudes and Predelinquency" (4).

A check was made on the accuracy of the scoring of the Glueck Scale by this interviewer. For this purpose a comparison was made with the results obtained by Dr. Jean Garneau, Ph.D., who had independently scored the Table on a random sample of thirty-one of the one hundred and forty boys scored. There was a time difference in these two scorings of from two to six months. Dr. Garneau as Chairman of the Prisoner Selection Committee has had experience administering the Table for about two years. This comparison of scores would thus permit a check on the accuracy and consistency of the scoring by this interviewer. Results of the comparison showed that using the more rigid four-class division of the Scale twenty eight of the thirty-one boys so checked were placed in the same category by both interviewers. Using the usual two class comparison of over 250 vs. under 250, there was agreement on thirty out of the thirty one boys. This represents an agreement of better than 96 per cent of this subsample.

RESULTS AND DISCUSSION

After the Social Prediction Table had been administered and scored, the number of offences of the boy in question was ascertained and the Tables were separated into the four groups representing first offenders, second offenders, third offenders, and fourth or subsequent offenders. Within each of these groups the Tables were subdivided according to the scores the boys had obtained and grouped according to the four score-classes; under 200, 200-249, 250-299, and 300 and over.

The grouping of the scores obtained in these classes is shown in Table XIX.

TABLE XIX

GLUECK PREDICTION TABLE SCORES FOR CLASSES OF OFFENDER
(WITH A FOUR-CLASS DIVISION OF SCORES)

Failure Score	1st offence	2nd offence	3rd offence	4 or more offences	Totals
Under 200	15	8	2	0	25
200 - 249	6	7	3	0	16
250 - 299	8	12	8	2	30
300 and over	11	22	26	10	69
Totals	40	49	39	12	140

Further grouping of these scores into the two categories of over 250 and under 250 (where a score of 250 is considered the "cutting off point " for 'persistent' delinquency) is given in Table XX.

TABLE XX

GLUECK PREDICTION TABLE SCORES FOR CLASSES OF OFFENDER (WITH A TWO-CLASS DIVISION OF SCORES)

Score	Class of Offender: 1st offence	2nd offence	3rd offence	4 or more offences	Totals
Under 250	21	15	5	0	41
Over 250	19	34	34	12	99
Totals	40	49	39	12	140

Using a χ^2 test of independence to see if there is any relation between scores obtained and the number of offences, the null hypothesis is that there is no relation between the scores obtained and the class of offender. Corrected $\chi^2 = 20.32$ which for 3DF gives a probability $<.001$, so we can reject the null hypothesis. Since the χ^2 test shows that there is a relation between scores and classes of offenders we can now consider each of these classes of offender separately. It must be remembered from the statement of the problem that one would expect the highest percentage of scores over 250 in the classes of fourth or subsequent, and third offences. The number of scores over 250 in the class of second offenders would be lower and in the class of first offenders it would be lowest. The converse would, of course, be expected for scores of under 250. This can be tested for each class of offender using the Binomial test

(where p is the probability of a score of under 250 and q is the probability of a score over 250). We can make some estimate of p from the results of the total sample and in this case it would be .29 and q .71. With these values of p, the probability of as few as zero fourth offenders obtaining a score of under 250 is P .01641; the probability of as few as five third offenders obtaining a score of under 250 is P .01518; the probability of as few as fifteen second offenders obtaining a score of under 250 is P .64424; and the probability of as few as 21 first offenders obtaining ascore of under 250 is P .00151. One can see from these results that the difference in scoresobtained is most distinct for third and fourth offenders (significant at approximately the 1 per cent level of confidence); for the second offenders the difference in scoresobtained is not as distinct and not significant; for the first offenders the difference is highly significant with approximately an equal number obtaining scores of over 250 and scoresof under 250.

On the basis of these results, one can conclude that the Glueck Social Prediction Table can differentiate between first, second, and third and subsequent offenders, and this differentiation is in the direction predicted in the statement of the problem. This conclusion, then, gives some evidence to believe that the Social Prediction Table has possibilities as apredictive device for determining probability of recidivism for young adult male offenders (for an Alberta Gaol population at least). Whether the

Table will actually work as a predictive device will have to await results of a longitudinal study such as is presently being conducted by the Prisoner Selection Committee. If the Table is a good predictive device then one would expect for the group of forty first offenders, the nineteen who had scores of over 250 will be recidivists while the twenty one who had scoresof under 250 will not become involved in subsequent offences. Similarly we would expect that few, if any, of the fifteen second offenders - who had scores of under 250 on the Table - will become involved in further offences. (A five year follow-up of these individuals is being planned to determine this predictive accuracy for the Glueck Table.)

RESULTS FOR THE BOWDEN SAMPLE COMPARED WITH OTHER VALIDATION STUDIES

It might be interesting to compare the results obtained for the Bowden group with the results from other validation studies. While these data are not specifically set up for such a comparison, it is possible with a few rather arbitrary manipulations. A major difficulty here relates first to the ambiguity of the term 'persistent' in discussing the prediction of persistent delinquency. We will have to eliminate the classof first offendersfrom our data here because we do not know which are 'persistent' offenders. That third and fourth offenders are persistent delinquents can be fairly safely assumed. The problem is with second

offenders and whether they can be classed as 'persistent' offenders. Since this may be rather arbitrary they could be included for purposes of this comparison and this would give us a sample size of 100 (reduced from 140 by excluding first offenders). The second problem we have in equating our data relates to the 'retrospective' nature of the other validity studies. This means that one assumes that the score obtained now would be exactly the same as the scores that these individuals would have obtained had they been tested at age six. (While it was felt that there are few defensible reasons for this assumption and many reasons for opposing it; it was made in order to equate our results with those of the other studies which had all made this assumption.) If correct, this assumption would allow one to interpret the data as a validation study on the accuracy of prediction for the Glueck Table. Since eighty of the hundred boys (classed as 'persistent' delinquents) from the Lowden sample had scores of over 250 then the Glueck would have had an accuracy of prediction (retrospectively) of 80 percent. (Compare this figure with total sample accuracy of 70 percent, 90 percent accuracy for only third, fourth and subsequent offenders; and 100 percent accuracy considering only 4th and subsequent offenders).

Table XXI shows a comparison with the other retrospective studies mentioned previously in this paper.

TABLE XXI

A COMPARISON OF ACCURACY OF PREDICTION FOR THE BOWDEN SAMPLE COMPARED WITH OTHER VALIDITY STUDIES

Validity Studies	Accuracy of Prediction
Bowden Group (2, 3, 4th offences)	80 %
New Jersey Study	80.4%
Unraveling Juvenile Delinquency (Glueck)	85.8%
Richard E. Thompson Study	91 %
Black and Glick Study	91 %

Consideration must be taken of the fact that some of these studies included both delinquents and non-delinquents (although not matched as in the Glueck study). Thus the figure obtained for accuracy of prediction pertained both to prediction of non-delinquency and of persistent delinquency. However, the accuracy of both these predictions was similar enough that the combined figure is a fairly good representation of the accuracy for prediction of delinquency alone. (For instance in the Thompson study, accuracy of predicting delinquency was 90% and accuracy of predicting non-delinquency was 91.3% with the combined accuracy of 91%.)

While the possible accuracy of prediction for the Bowden group compared favorably with the New Jersey Study, it was generally poorer than the accuracy of prediction for

the other studies. However, if, in the arbitrary division of what constitutes 'persistent' delinquents, one included only third and fourth or subsequent offenders then, for a sample size of fifty one, the possible accuracy of prediction for the Bowden group would be 90.2 per cent. This possible degree of accuracy would then compare quite favorably with the results from the other studies.

ABILITY OF THE GLUECK TABLE TO DIFFERENTIATE BETWEEN CLASSES OF OFFENDERS FOR DIFFERENT AGE GROUPS

Since the factors on the Glueck Table relate largely to family life there may be a possibility that the age of the offender in this sample effects the score he obtains. This may be especially true when the scoring is done from data obtained in an interview situation where the emphasis is placed upon the perceived attitudes of the individual to his familial relationships. It might be argued that as the individual matures and becomesfurther removed from the home environment his perception of what his family life was like (in relation to the factors on the Glueck Table) may change considerably. This argument would suggest the possibility that the older inmates would achieve different scores on the Table than the younger inmates and hence that the Table might not be as useful for this age group. A more serious problem would arise from this hypothesis if it was found that the number of offences an individual had committed was a function of his age. If this were true

then the significance of the data obtained from Table XX may not be attributable to the number of offences the individual had committed, but merely to his age! It is necessary, then, to determine if there is any correlation between the age of the offender and the number of offences he has committed. To test this, a biserial correlation was made on the data in Table V. For purposes of this correlation first and second offenders were grouped, as were third and fourth or subsequent offenders as shown in the following table:

TABLE XXII

AGE OF OFFENDERS IN BOWDEN SAMPLE (FROM TABLE V)

Age of Offender	Number of Offences		Totals
	1 or 2	3 or more	
16	6	5	11
17	11	6	17
18	21	12	33
19	10	6	16
20	7	11	18
21	13	3	16
22	6	3	9
23	10	3	13
24	3	1	4
25	2	1	3
Totals	89	51	140

Results of this analysis give a biserial correlation of $r_b = .12$ and the sampling error is approximately $\sigma r_b = .108$. On the basis of these results we cannot reject with any certainty ($P > .1$) the null hypothesis that r_b is a chance deviation from zero. One can conclude, therefore, that there is no significant correlation between the age of the offender and the number of offences he has committed.

Having shown that there was no significant correlation between the age of the offender and the number of offences he had committed the next step was to determine if the Glueck

Table differentiated between number of offences as well for the older offenders as for the younger offenders.

To determine this the Bowden sample was divided into two groups; the first consisting of all offenders 18 years of age and younger and the second group consisting of all offenders age 19 and over. The results of this division are given in the following tables. (Again the first and second offenders were grouped together and the third and fourth or subsequent offenders were grouped.)

TABLE XXIII

GLUECK PREDICTION TABLE SCORES FOR CLASSES OF OFFENDERS IN THEAGE GROUP 18 AND UNDER

Score	Class of Offender		Totals
	1 or 2	3 or more	
Under 250	15	2	17
Over 250	23	21	44
Totals	38	23	61

Results of the χ^2 test for this 2 x 2 Table are as follows: $\chi^2 = 6.75$, $P < .01$.

TABLE XXIV

GLUECK PREDICTION TABLE SCORES FOR CLASSES OF OFFENDER IN THEAGE GROUP 19 AND OVER

Score	Class of Offender		Totals
	1 or 2	3 or more	
Under 250	21	3	24
Over 250	30	25	55
Totals	51	28	79

Results of the χ^2 test for this 2 x 2 Table are as follows: $\chi^2 = 7.93$, $P < .01$.

An inspection of the results of the tests for these two tables indicates that the Social Prediction Table can apparently differentiate between classes of offenders as well for the older age group as for the younger.

Thus it seems reasonable to suggest that if the Glueck Table can predict the probability of recidivism of young adult male offenders (age 16 to 25), it should be able to make this prediction as accurately for those individuals over age 18 as it can for individuals age 18 or younger.

SUMMARY AND CONCLUSIONS

SUMMARY

This study was conducted to determine , in part, whether the Glueck Social Prediction Table could be used as a predictive device for determining probability of recidivism for young adult male offenders. Because the Glueck Table has been used to detect 'persistent' delinquents if was felt that it might similarly be used to detect recidivism. The first step in testing this hypothesis is to determine whether the Table can give differential results for known classes of offenders. This step was the major problem of the present study. (The second step is - given the first - to determine whether the Table can give these differential results predictively. Such a longitudinal study is currently in progress.)

A group of 140 known young adult male offenders incarcerated in an Alberta Gaol were individually scored on the Glueck Table by an interview technique. This group of offenders was then divided on the basis of their official court records into four classes representing first offenders, second offenders, third offenders and fourth or subsequent offenders.

The scores obtained on the Glueck Table were grouped into two classes representing scores of under 250 and scores of over 250 (where 250 is considered the 'cutting off' point for determining persistent delinquency).

A comparison was made between the number of boys who obtained high and low scores on the Table within each of the four classes of offenders in order to determine whether there were differences between these four classes of offenders on the basis of the score obtained on the Glueck Table.

The predicted direction of these difference, if any, (determined from the nature of the Table) was for an increase in difference from first to fourth or subsequent offenders. Thus one would expect the widest difference of socres for fourth and then third offenders and the least difference for first offenders.

The data for each of the four classes of offenders were analyzed separately in order to determine the probability of at least as few as the number who obtained scoresof under 250 doing so on the basis of chance alone. The theoretical expectancies for these classes was estimated from the combined results for all four classes. While t is was a poor estimate, in view of the fact that the previous test had shown that the four classes of offenders should be considered independently, it was the only estimate for these values which was available.

A comparison was made between the age of the offender and the number of offences he had committed in order to determine if the age of the offender might have an influence on the results that were obtained.

The data were further divided to determine if the Table could differentiate between these classes of offenders as well for older offenders as for younger offenders. For this purpose the division was made into two groups, the first consisting of all individuals aged 18 or younger and the second group consisting of all individuals aged 19 or over. The significance of the results for these two groups was obtained and compared. Finally, by some arbitrary manipulation of the data from the Bowden group a brief comparison was made between the results for this study and the resultsof previous validation studies.

CONCLUSION

On the basis of the results obtained for this sample one can conclude with a fair degree of certainty that the Glueck Social Prediction Table can differentiate between classes of offenders (by number of offences). This differentiation is a relative one, however. The widest differentiation between scores obtained on the Table was found for third and fourth offenders with nearly all (90%) the individuals in these classes obtaining scores of over 250. Of the individuals in the class of second offenders, 69 percent had scores of over 250, while less than 50 percent of the individuals in the class of first

offenders had scores of over 250. Thus the test does seem to differentiate recidivists (especially those with three or more offences) from first, or even second offenders. The relativity of this information results from the classification of offenders. While at the time of administration of the Table all first offenders were placed in this class on a basis of their previous record it may well turn out that many of them will be recidivists. The same applies to second offenders. For this reason one cannot expect absolute differentiation between first, second and subsequent offenders. (This would be that approximately 100 percent of all first offenders obtained scores of under 250, while nearly all recidivists obtained scores of over 250). The best interpretation we can give from our data is that nearly all recidivists (with three offences or more) obtain scores of over 250 and very few obtain scores of under 250. One cannot, as yet, claim the converse, i.e., that nearly all individuals who obtain scores of over 250 are (or will be) recidivists. One cannot reach this conclusion yet because we do not know how many of the first offenders in this sample will actually be recidivists. (The test of this must await results of a longitudinal study of these first offenders.) These data, however, do give some evidence to suggest that the Table may prove useful as a predictive device for assessing probability of recidivism and because of this such a longitudinal

study seems warranted.

It was found that the Table differentiated the recidivists (third or more offences) as well, for the age group 19 and older, as it did for the age group 16 to 19. No significant correlations were found between the age of the offender and the number of offences he had committed. Thus, one can conclude that, if the Table can predict recidivism, it should be able to do so as well for the older as for the younger offenders in this age group.

Finally, it might be noted that the Glueck Prediction Table (in spite of the authors' enthusiastic claims) still lacks adequate validation. Because it has shown some promise in the relatively new field of predicting criminal behaviour it has been frequently accepted and used, as a predictive device, with few reservations or qualifications. Until such time as adequate validation studies have been completed on the Glueck Social Prediction Table, the need for continued caution in the interpretation and use of results obtained from this Table is strongly emphasized.

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